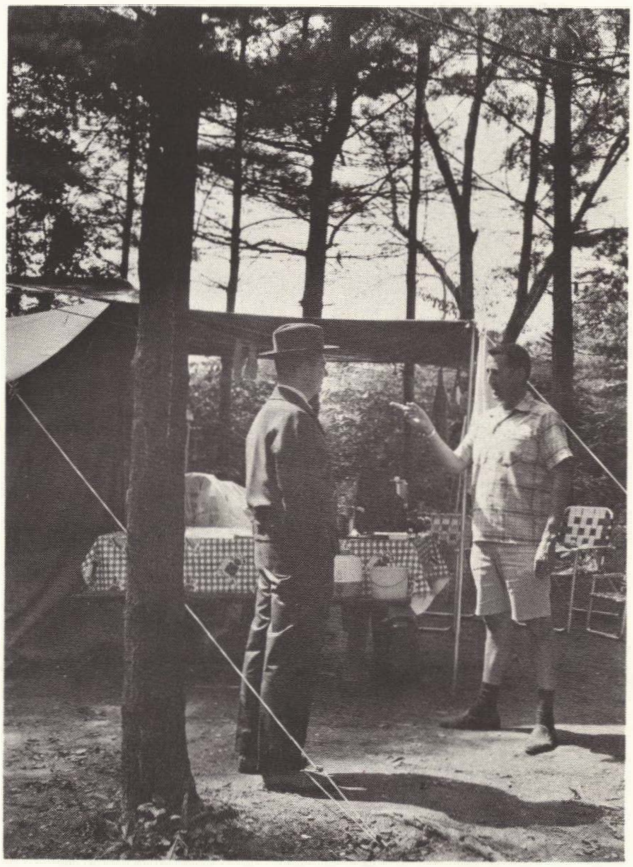
FORESTRY SCIENCE
IN THE SERVICE OF MAN

April 1969

FOREST RECREATION

Camper Problems



It's 2:00 a.m. There's a knock at the door. You open the door and are confronted with: "Will you please organize a search party to find my cat?"

An unusual request? No, not to a campground manager. This type of individual has come to expect the unusual from his customers -- the campers. In fact, campground operators located near metropolitan centers say their main problems involve people.

In a recent survey of camp managers' viewpoints on campers and campground operations, two Forest Service researchers at Syracuse, N. Y., found most operators concerned with public relations. In their study report, the two recreation scientists say, "a successful campground manager must be able to communicate well with people as well as to manage the facilities under his control."

NOTICE TO PUBLISHERS

Information in this news bulletin may be reprinted. Please give appropriate credit. Additional information or photographs may be obtained from: **Information Services** Tel—(Area Code 215) FL 2-5800, Ext—288.

NORTHEASTERN FOREST EXPERIMENT STATION • UPPER DARBY, PENNSYLVANIA 19082

As to why people camp, the managers had this to say -- "to avoid the expenses of hotels and motels during vacation," or because the campers are looking for the "enjoyment of the outdoor environment."

Other things that attract campers to campgrounds include the way the site is screened with vegetation, cleanliness, and the nearness to water. These and other factors relating to why people camp, and the problems of running a campground are printed in a Forest Service Research Note, NE-88. Copies are available from: Information Services, Northeastern Forest Experiment Station, 6816 Market Street, Upper Darby, Pa. 19082.

FOREST
INSECTS AND DISEASE

Checking Scale Insects

Strawberry baskets, packing excelsior, siding, and veneer -- these are some of the products made from the yellow poplar tree. The valuable yellow poplar also contributes shade to city dwellers.

Though yellow poplars flourish in deep, rich soils, they are often attacked by tulip tree scale. This scale insect -- not alone, but in armies of several thousands -- forces its way into the tree's food-carrying vessels and removes so much sap that the tree suffers the effects of malnutrition. Leaves may wither, limbs may die, and the tree's main, and most timber-valuable stem may develop a crook, making it practically useless for wood products.

Researchers at the Forest Insect and Disease Laboratory, Delaware, Ohio, in attempting to control scale insects and to alleviate valuable tree losses, are checking the environment and activities of tulip tree scale. They know that air movement, or wind, is the culprit that carries the insect from poplar to neighboring poplar.

Without a handy cure for the scale insect, Research Entomologist Dr. David Donley devised a new planting pattern to serve as an interim remedy. Donley found that if yellow poplar are planted in alternate rows with red pine, the red pine will, in many cases, serve as a wind screen to block the passage of scales from poplar to poplar. Pine provides no attraction for any tulip tree scale that might latch onto it, so that, held fast to the pine, the scale will starve -- to the good of some nearby poplar.

FOREST
PRODUCTS MARKETING

Wooden Pallets And Food

Have you ever noticed the wooden pallets around your grocer's store? Wooden pallets are rugged wood units that do the essential jobs of moving, stacking, and organizing products in all shapes and sizes -- from napkins, to baking soda, canned juices, jellies, detergents, flour, and sugar.

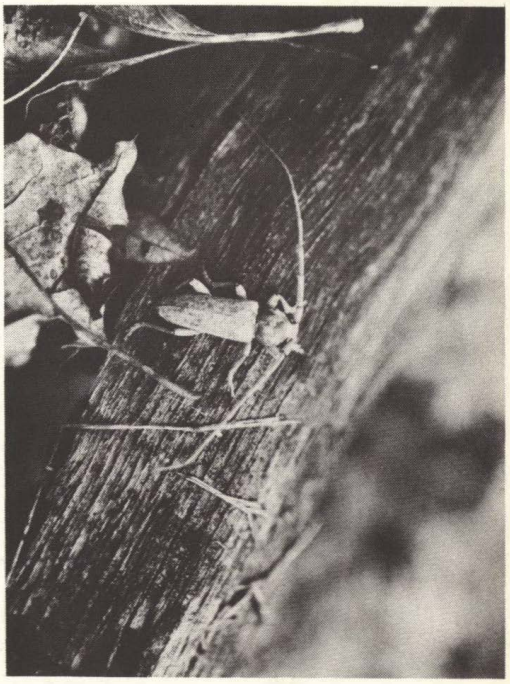
In the food, transportation, and forest industries, the wooden pallet is becoming increasingly conspicuous. Wooden pallets in increased numbers are also making the scene in oil refineries, chemical industries, breweries, meat packing and steel fabricating plants.

Researchers at the Forest Products Marketing and Utilization Laboratory, Princeton, W. Va., have been studying the wooden pallet. From observation and investigation, they have determined that increases in use, efficiency, and quality of pallets could benefit all the industries that use them. More, better, and more efficiently used wooden pallets could mean money and time saved in handling the tremendous volumes of materials that move daily from manufacturers, to distributing centers, to markets, and eventually home to Mrs. Consumer.

Details of the study appear in NE-121, The Unit-Load Explosion in the Food Industry, done by Princeton researcher Dr. Walter B. Wallin, in cooperation with John J. Strobel of Better Management Services, Inc., Staten Island, New York.

FOREST
INSECTS AND DISEASE

Toward Ending Wormy Wood



By boring into trees, the red oak borer -- primary pest of upland oaks -- degrades the quality of oak lumber and makes for "wormy oaks" that are considered unfit for harvest. Although only three or four borer populate a tree at a time, their damage accumlates, so that it is considerable after 40 or 60 years, when the sawlogs are ready for harvest.

Boring insects in general reduce the value of red, black, and scarlet oak timber throughout a 61 million acre area of forested land, that includes the Appalachians. Borer damages reduce the value of oak lumber produced in Eastern Kentucky and Southeastern Ohio alone by at least $7.5 million annually.

Little was known about the life history of the borer before scientists at the Forest Insect and Disease Laboratory, Delaware, Ohio looked into the matter. The pest is seldom seen by forest managers or entomologists, because it is active outside the tree only three or four weeks out of every two years, and this activity takes place at night.

In one study, scientists watched the mating habits of adult borer. It proved to be colorful. Since borer are nocturnal, each insect was treated with flourescent paint -- the males, green; the females, red -- so that their habits could be traced in the dark. After this study, scientists found that the red oak borer has a two-year life cycle. But, for some unknown reason, adult borer are only active during odd-numbered years (like 1969).

This information has led to a cutting schedule that might help control the insects.. By cutting host trees during the period from August of the odd-numbered years until September of the even-numbered years, scientists believe all borer can be killed.